

REMARKS

This Application has been carefully reviewed in light of the Office Action mailed August 10, 2006. Claims 1-9 and 11-20 were pending in the application and are rejected in the Office Action. For the reasons discussed below, Applicant respectfully requests reconsideration and favorable action in this case.

Section 103 Rejections

The Examiner rejects Claims 1-7, 9, and 11-20 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,563,793 issued to Golden ("Golden") in view of U.S. Patent No. 6,408,001 issued to Chuah ("Chuah").

Independent Claim 1 of the present application recites the following limitations:

A method for supporting packet communications in an optical network, the method comprising:

receiving packet data at a synchronous optical network element; and
switching the packet data to a concentrated path, the concentrated path providing an optical link between the synchronous optical network element and a remote synchronous optical network element;

wherein switching comprises multiprotocol label switching to concentrate a plurality of label switched paths to the concentrated path and to provide a virtual private network over a synchronous optical network.

Independent Claims 11 and 19 recite similar, although not identical, limitations.

In order to establish a *prima facie* case of obviousness, three requirements must be met: (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge available to one skilled in the art, to modify a reference or combine multiple references; (2) there must be a reasonable expectation of success; and (3) the prior art reference (or combination of references) must teach or suggest all of the claim limitations. M.P.E.P. § 2143. In the present case, a *prima facie* case of obviousness cannot be maintained for at least two reasons. First, neither *Golden* nor *Chuah* provides a suggestion or motivation to combine the references in the manner suggested by the Examiner. Second, even assuming for the sake of argument that the references did suggest or motivate a combination of the references to a person of ordinary skill in the art at the time of the invention, *Golden* and

Chuah, whether considered singly, in combination with one another, or in combination with information generally available to those of ordinary skill in the art at the time of the invention, still fail to disclose all of the elements of the pending claims.

Claim 1 requires multiprotocol label switching to concentrate a plurality of label switched paths to a concentrated path of an optical link in a synchronous optical network to provide a virtual private network over the synchronous optical network. Furthermore, Claim 1 recites that the concentrated path provides an optical link between the synchronous optical network element and a remote synchronous optical network element. However, neither of the cited references disclose the concentration of label switched paths on an optical link between optical network elements in a synchronous optical network to provide a virtual private network over the synchronous optical network.

In the rejection of Claim 1, the Office Action indicates that *Golden* does not teach concentrating a plurality of label switching paths to a concentrated path and instead cites to *Chuah* for a teaching of this limitation. However, there is no disclosure in either reference of using MPLS to concentrate a plurality of label switched paths *on an optical link between two synchronous optical network elements of a synchronous optical network*, nor is there a disclosure that the label switching paths are concentrated to provide a virtual private network over the synchronous optical network.

The only reference to MPLS with respect to the invention of *Golden* is at Col. 20, lines 35-44, which only mentions that certain network elements (NEs) in the disclosed private network 26 may support MPLS. This is not a disclosure of the specific limitations at issue here, since the mere mention of MPLS is not sufficient to disclose the specific use and application of MPLS recited in the claim.

In addition, although *Chuah* discusses MPLS in some detail, it never mentions or suggests the use of MPLS in a synchronous optical network. Instead, it discloses the use of MPLS in an IP packet network comprising a number of routers. Furthermore, it specifically contrasts the use of circuit-switched networks (such as synchronous optical networks) and IP networks and then goes on to state that MPLS is used in IP networks for IP routers (see

Background section). Thus, not only does it not disclose the use of MPLS to concentrate a plurality of label switched paths on an optical link between two synchronous optical network elements, it also teaches away from such a disclosure.

Furthermore, there is no teaching or suggestion to combine and then modify the references the teach the limitation at issue. The M.P.E.P. sets forth a strict legal standard for finding obviousness based on a combination of references. According to the M.P.E.P., “Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge [that was] generally available to one of ordinary skill in the art” at the time of the invention. M.P.E.P. 2143.01. The “fact that references can be combined or modified does not render the resultant combination [or modification] obvious unless the prior art also suggests the desirability of the combination” or modification. *Id.* (emphasis in original).

The governing Federal Circuit case law makes this strict legal standard even more clear. According to the Federal Circuit, “a showing of a suggestion, teaching, or motivation to combine . . . prior art references is an essential component of an obviousness holding.” *In re Sang-Su Lee*, 277 F.3d 1338, 1343 (Fed. Cir. 2002) (quoting *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1124-25 (Fed. Cir. 2000)). “Evidence of a suggestion, teaching, or motivation . . . may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, the nature of the problem to be solved.” *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999). However, the “range of sources available . . . does not diminish the requirement for actual evidence.” *Id.* In *In re Dembiczak*, the Federal Circuit reversed a finding of obviousness by the Board of Patent Appeals and Interferences, explaining that proper evidence of a teaching, suggestion, or motivation to combine is essential to avoid impermissible hindsight reconstruction of an applicant’s invention:

Our case law makes clear that the best defense against the subtle but powerful attraction of hind-sight obviousness analysis is *rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references*. Combining prior art references without

evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability—the essence of hindsight.

175 F.3d at 999 (quoting *W.L. Gore & Assoc., Inv. v. Garlock, Inc.*, 721 F.2d 1540, 1553 (Fed. Cir. 1983)) (emphasis added) (citations omitted).

In the present case, Applicant respectfully maintains that the Examiner is improperly using the Applicant's disclosure as a blueprint for piecing together various elements of *Golden* and *Chuah*. For example, the Examiner merely asserts that it would have been obvious to one of ordinary skill in the art to adapt the concentration of label switching paths disclosed in *Chuah* to the network of *Golden*. However, the Examiner provides no reasoning as to why it would be obvious to apply the teachings of *Chuah* to a synchronous optical network (which *Golden* only mentions in passing as a type of network). As noted above, *Chuah* never refers to synchronous optical networks and, in fact, teaches away from the application of its teachings to circuit switched networks. Furthermore, nothing in *Golden* suggests applying MPLS over a synchronous optical network link. In fact, that reference specifically refers to MPLS in a context in which no other network elements support MPLS. Thus, it does not suggest using MPLS over a link between two of the disclosed network elements.

For at least these reasons, Applicant respectfully submits that it does not anticipate Claim 1. Furthermore, independent Claims 11 and 19 contain analogous limitations and are allowable for similar reasons. Therefore, Applicant respectfully requests allowance of Claims 1, 11, and 19, as well as the claims that depend from these independent claims.

In addition to depending from an allowable independent claim, many of the dependent claims recite additional limitations not disclosed by *Golden* or *Chuah*. By way of example only, Applicant discusses some of these dependent claims below.

For example, dependent Claim 3 recites that the virtual private network, provided by the multiprotocol label switching discussed above, “links the Ethernet port of the synchronous optical network element and an Ethernet port of the remote synchronous optical network element.” Claim 12 recites a similar limitation. The Office Action asserts that this limitation is disclosed by Figure 11 of *Golden*. However, as discussed above, *Golden* discloses that only one of the NEs in network 26 uses MPLS (ostensibly to support its connection to another network) and that the network includes a chain of incompatible NEs. *See* Col. 20, lines 35-44. For example, this passage discloses that a first NE may support diff-serv tagging, followed by an NE supporting MPLS, and then followed by another NE supporting diff-serv tagging. Therefore, even assuming that the cited references disclosed the limitations of Claims 1 and 11 (which Applicant asserts do not for the reasons given above), the MPLS switching is not performed across the network (from the Ethernet port of one network element to the Ethernet port of a remote network element). For at least this additional reason, Applicant respectfully requests allowance of Claims 3 and 12.

In addition, dependent Claim 4 of the present application recites that “a multiprotocol label switch (MPLS) stack delineates a plurality of MPLS paths for the virtual private network.” Claim 15 recites a similar limitation. The Office Action asserts that this limitation is disclosed at Col. 9, lines 39-61 of *Chuah*. However, this passage does not disclose or mention the use of a MPLS stack to delineate paths in a virtual private network. For at least this additional reason, Applicant respectfully requests allowance of Claims 4 and 15.

Furthermore, dependent Claim 5 recites “mapping the packet data among the MPLS paths.” Dependent Claim 6 recites that this mapping is “based on Ethernet media access control addresses included in the packet data.” Claims 16 and 17 recite similar limitations, respectively. The Office Action asserts that Col. 9, lines 39-61 of *Chuah* discloses the limitations of Claims 5 and 16. However, Applicants respectfully fail to see how this passage discloses mapping packet data among MPLS paths. With respect to Claims 6 and 17, the Office Action asserts that Col. 10, line 24-46 discloses the limitations of these claims. However, this passage does not even disclose using MPLS, much less mapping among MPLS paths based on Ethernet media access control addresses included in the packet data. For at

least this additional reason, Applicant respectfully requests allowance of Claims 5, 6, 7, 16, 17, and 18.

The Examiner also rejects Claim 8 under 35 U.S.C. § 103(a) as being unpatentable over *Golden* in view of *Chuah*, and further in view of U.S. Publication No. 2001/0033570 issued to Makam (“*Makam*”).

As argued in Applicant’s previous response, which was not addressed in the latest Office Action, Applicant respectfully traverses the rejection of Claim 8 since Applicant believes that *Makam* **does not qualify as prior art**. The present application claims priority to and is a continuation of U.S. Patent Application No. 09/303,428, which was filed on May 3, 1999. Since *Makam* was filed on February 15, 2001 and has a priority claim to a provisional application filed on February 18, 2000, Applicant does not believe that *Makam* qualifies as prior art under any section of 35 U.S.C. § 102. For at least this reason, Applicant respectfully requests allowance of Claim 8.

CONCLUSION

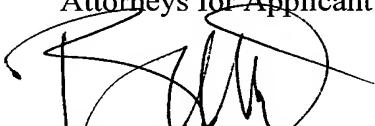
Applicant has made an earnest attempt to place this case in condition for allowance. For the foregoing reasons, and for other reasons clearly apparent, Applicant respectfully requests full allowance of all pending claims.

If the Examiner feels that a telephone conference would advance prosecution of this Application in any manner, the Examiner is invited to contact Brian W. Oaks, Attorney for Applicant, at the Examiner's convenience at (214) 953-6986.

The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to Deposit Account No. 02-0384 of BAKER BOTTTS L.L.P.

Respectfully submitted,

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